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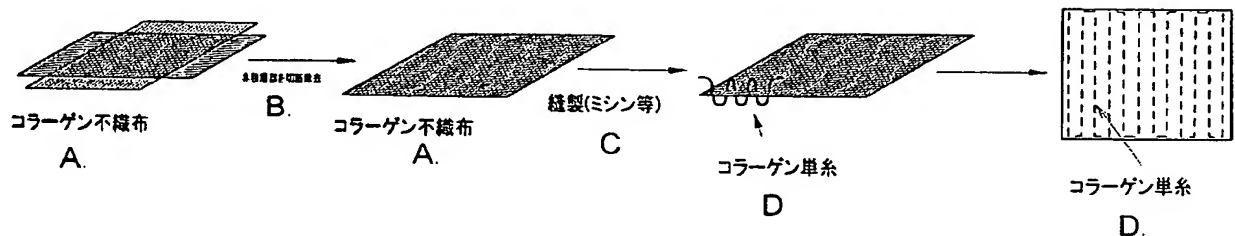
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(54) Title: BIODEGRADABLE SUBSTRATE, PROSTHETIC MATERIAL FOR TISSUE REGENERATION AND CULTURED TISSUE

(54) 発明の名称: 生分解性基材及び組織再生用補綴材並びに培養組織



A...NONWOVEN COLLAGEN FABRIC
B...REMOVING NON-LAMINATED PART
C...STITCHING (WITH SEWING MACHINE, ETC.)
D...COLLAGEN FILAMENT

(57) Abstract: A biodegradable substrate usable as a prosthetic material for medicinal use (for example, tissue regeneration) or a cell culture substrate which is highly compatible with cells, in particular, facilitates the invasion of cells into the inside of the substrate and has a thick structure similar to woven fabrics without resort to any troublesome techniques such as lamination or weaving/knitting. The biodegradable substrate is obtained by stitching a biodegradable nonwoven fabric with a biodegradable threadlike article. As the nonwoven fabric, use is made of, for example, a material wherein first and second layers, each having filaments of a threadlike article made of collagen located in parallel, are laminated and adhered to each other so that the alignment direction of the filaments of the threadlike article in the first layer and that of the second layer are arranged at a certain angle. This nonwoven fabric is stitched with a threadlike article made of collagen. It is also possible that a filmy material having been treated with a biodegradable binder such as collagen or gelatin is piled on the nonwoven fabric and stitched.

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TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

— 請求の範囲の補正の期限前の公開であり、補正書受領の際には再公開される。

(84) 指定国 (広域): ARIPO 特許 (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), ユーラシア特許 (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), ヨーロッパ特許 (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI 特許 (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

2文字コード及び他の略語については、定期発行される各PCTガゼットの巻頭に掲載されている「コードと略語のガイダンスノート」を参照。

添付公開書類:

— 国際調査報告書

(57) 要約:

本発明は、細胞親和性、特に基材内部への細胞侵入を容易にし、重層化や織り編み等の技術的に困難な工程を伴うことなく、厚みある織布に近い構造を有する医療用、例えば組織再生用の補綴材や細胞培養基材として用いることのできる生分解性基材に関する。生分解性の不織布を生分解性の糸状物で縫製し、本発明の生分解性基材を得る。不織布として、例えば、コラーゲン糸状物が複数本平行に配列されてなる第1の層と第2の層を、第1の層と第2の層との糸状物の配列方向が角度をなすように積層し、相互に接着したものを使い、コラーゲン糸状物で縫う。また、不織布にコラーゲンやゼラチンのような生分解性物質でバインダー処理した膜状物を重ね合せて縫製してもよい。

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/13847

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl.⁷ B32B5/26, A61L27/14, A61L27/56, A61L27/38

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl.⁷ B32B1/00-35/00, D04H1/00-18/00, A61L27/00-27/60

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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Kokai Jitsuyo Shinan Koho	1971-2004	Jitsuyo Shinan Toroku Koho	1996-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2000-271207 A (Nissho Corp.), 03 October, 2000 (03.10.00), (Family: none)	1-17
X	JP 2000-210376 A (Nissho Corp.), 02 August, 2000 (02.08.00), (Family: none)	1-17
X	JP 2000-93497 A (Nissho Corp.), 04 April, 2000 (04.04.00), (Family: none)	1-17
P, X	JP 2003-301362 A (Nipro Corp.), 24 October, 2003 (24.10.03), (Family: none)	1-17

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

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"E" earlier document but published on or after the international filing date

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
09 February, 2004 (09.02.04)Date of mailing of the international search report
02 March, 2004 (02.03.04)Name and mailing address of the ISA/
Japanese Patent Office

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